

Rec'd PCT/PTO 12 JU4 2005 S1

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



10/541951



(43) International Publication Date
19 August 2004 (19.08.2004)

PCT

(10) International Publication Number
WO 2004/070979 A2

(51) International Patent Classification⁷:

H04J

(21) International Application Number:

PCT/US2004/002614

(22) International Filing Date: 30 January 2004 (30.01.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

2003-023165 31 January 2003 (31.01.2003) JP

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

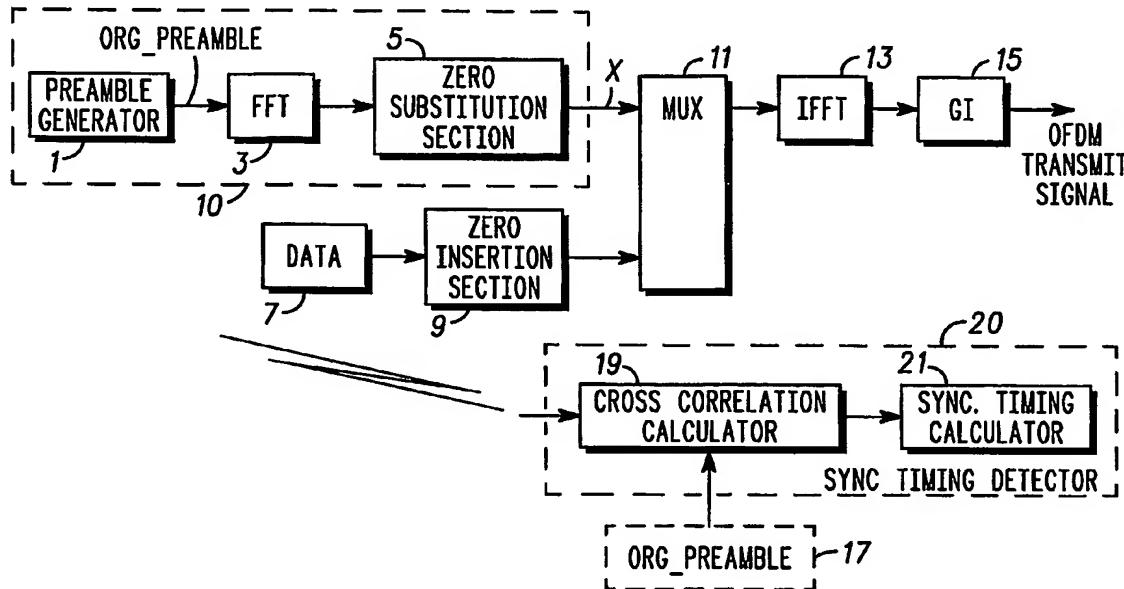
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: OFDM COMMUNICATION DEVICE



(57) Abstract: To provide high-quality communication even when the power for synchronization preamble is reduced in an OFDM communication device. To achieve symbol synchronization, an OFDM communication device obtains a zero amplitude reduced preamble signal by passing a specified synchronization preamble through an ideal low-pass filter to reduce a signal component near zero amplitude within a time domain, and time-multiplexes the obtained zero amplitude reduced preamble signal with transmit data to generate an OFDM transmit signal. A receiver section of the OFDM communication device determines the cross correlation between a receive signal and a specified synchronization preamble, which is patterned the same as the counterpart in a transmitter section of the OFDM communication device, and detects a synchronization position in accordance with the determined cross correlation.

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